PREDICTION OF SUSTAINABLE ENVIRONMENT TRAINING TOWARDS KNOWLEDGE TRANSFER THROUGH MOTIVATION TO LEARN

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ABSTRACT

Purpose: In today's organizational phenomenon, the attainment of knowledge enhances the organizations' success. Hence, the present study examines the prediction of sustainable environment training towards knowledge transfer directly and through motivation to learn.

Design/Methodology/Approach: In this study, the researcher used quantitative methods. In Saudi Arabia, the researcher collected data from different organizational employees such as services, finance, resources, information technology, management services, etc. The study utilized 288 samples to infer the results.

Findings: The researcher applied the famous software, i.e. analysis of Moment Structures (AMOS) version 26.0, to conclude the results. The study's outcomes confirmed a significant positive effect of intrinsic and extrinsic motivation and motivation to learn on transfer knowledge. Besides, motivation to learn mediates the association between intrinsic motivation and knowledge transfer but does not mediate the connection between extrinsic motivation and knowledge transfer.

Research, practical and social implications: The study's outcomes help foster a sustainable environment for training, implying a proactive approach to align education with ecological principles and promoting responsible resource use and conservation. Moreover, integrating knowledge transfer through motivation underscores the importance of cultivating a compelling learning environment and enhancing the effectiveness of educational initiatives by leveraging intrinsic and extrinsic motivational factors.

Originality/value: The anticipation of an enduring learning environment and motivation-based information dissemination can cultivate a cohort endowed with the requisite abilities and mindset to tackle worldwide predicaments and make meaningful contributions towards a more sustainable future.

Keywords: knowledge transfer, intrinsic motivation, extrinsic motivation, sustainable environment training, motivation to learn, Employees of Saudi Arabia.

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PREVISÃO DA FORMAÇÃO EM AMBIENTE SUSTENTÁVEL PARA A TRANSFERÊNCIA DE CONHECIMENTO ATRAVÉS DA MOTIVAÇÃO PARA APRENDER

RESUMO

Objetivo: no fenômeno organizacional atual, a obtenção de conhecimento melhora o sucesso das organizações. Por isso, o presente estudo examina a previsão de treinamento ambiental sustentável para a transferência de conhecimento diretamente e através da motivação para aprender.

Design/Metodologia/Abordagem: Neste estudo, o pesquisador utilizou métodos quantitativos. Na Arábia Saudita, o pesquisador coletou dados de diferentes funcionários da organização, tais como serviços, finanças, recursos, tecnologia da informação, serviços de gestão, etc. O estudo utilizou 288 amostras para inferir os resultados.

Constatações: O pesquisador aplicou o famoso software, ou seja, a análise de Estruturas de Momento (AMOS) versão 26.0, para concluir os resultados. Os resultados do estudo confirmaram um efeito positivo significativo da motivação intrínseca e extrínseca e da motivação para aprender sobre a transferência de conhecimento. Além disso, a motivação para aprender é mediadora da associação entre motivação intrínseca e transferência de conhecimento, mas não é mediadora da conexão entre motivação extrínseca e transferência de conhecimento.

Investigação, implicações práticas e sociais: Os resultados do estudo ajudam a promover um ambiente sustentável para a formação, implicaendo uma abordagem proativa para alinhar a educação com os princípios ecológicos e promover a utilização e conservação responsável dos recursos. Além disso, a integração da transferência de conhecimento por meio da motivação sublinha a importância de cultivar um ambiente de aprendizagem atraente e aumentar a eficácia das iniciativas educacionais, aproveitando fatores motivacionais intrínsecos e extrínsecos.

Originalidade/valor: a antecipação de um ambiente de aprendizagem duradouro e a disseminação de informações baseadas na motivação podem cultivar uma coorte dotada das habilidades e da mentalidade necessárias para lidar com os problemas mundiais e dar contribuições significativas para um futuro mais sustentável.

Palavras-chave: transferência de conhecimento, motivação intrínseca, motivação extrínseca, capacitação ambiental sustentável, motivação para aprender, Funcionários da Arábia Saudita.

1 INTRODUCTION

In the contemporary education landscape, there is a growing recognition of the interconnectedness between learning, environmental sustainability, and the motivation to acquire knowledge (Johnson, 2017). This evolving paradigm emphasizes predicting and fostering a sustainable training environment that imparts information and integrates principles of ecological responsibility. Understanding the intricate dynamics of motivation becomes pivotal for effective knowledge transfer (Hansmann, 2010; Valor et al., 2014). This introduction explores the nexus between predicting a sustainable learning environment, the transfer of knowledge, and the motivational factors that propel
individuals to engage in and persist with the learning process. Delving into these interconnected aspects unveils a comprehensive approach to education that equips learners with information and instills a sense of responsibility and enthusiasm for continued learning, ultimately contributing to a more sustainable and informed society.

In achieving knowledge transfer, intrinsic and extrinsic motivations play a massive role. In the dynamic context of education, predicting and cultivating a sustainable training environment go beyond traditional pedagogical approaches (Alkaher and Goldman, 2018; Riva et al., 2021). Integrating environmental sustainability into education is not merely an academic consideration but a strategic imperative for nurturing responsible global citizens. This involves forecasting the environmental impact of educational practices, incorporating eco-conscious methodologies, and instilling a sense of stewardship among learners (Radaković Andreja et al., 2017; Al Doghan et al., 2022).

Central to the success of this paradigm is the intricate interplay between motivation and knowledge transfer (Bhatti et al., 2022). Fueled by intrinsic and extrinsic factors, motivation emerges as the linchpin that propels learners through the educational journey. Intrinsic motivation, from personal interest, curiosity, and a genuine passion for learning, becomes a powerful force for sustainability education. Meanwhile, extrinsic motivators, such as recognition, rewards, or aligning educational goals with real-world applications, catalyze sustained engagement (Abdelwahed et al., 2022; Soomro and Shah, 2022). Understanding and leveraging these motivational dynamics enhances the effectiveness of knowledge transfer and contributes to the development of a mindset that values and internalizes the principles of sustainability. As learners are motivated to delve deeper into topics, apply acquired knowledge to real-world challenges, and perceive the relevance of their education to broader societal and environmental contexts, a more profound and lasting impact is achieved (Soomro et al., 2023).

In essence, the prediction of a sustainable environment for training intertwines with motivation as a transformative force. It extends beyond the conventional classroom setting, urging educators to incorporate motivational elements into the learning experience strategically. By doing so, education transcends the traditional boundaries of information dissemination. It evolves into a catalyst for shaping environmentally conscious individuals who are not only knowledgeable but also motivated to contribute meaningfully to a sustainable future ((Lam and Lambermont-Ford, 2010; Law et al.,
Based on these important, the researcher raised the questions:

**RQ1:** What is the role of a sustainable training environment in enhancing knowledge transfer?

**RQ2:** How does motivation to learn mediate the relationship between intrinsic and extrinsic motivation and knowledge transfer?

Examining the role of a sustainable training environment in knowledge transfer is crucial for elucidating how educational settings can be optimized to align with ecological principles. This research question probes into the elements within a sustainable learning environment—ranging from eco-conscious curriculum design to green teaching methodologies—contributing to more effective knowledge transfer. By uncovering these dynamics, the study can inform educational practices, influencing the development of curricula that not only disseminate information but also cultivate a deeper understanding and integration of sustainable principles. Understanding these dynamics can provide practical strategies for educators to leverage motivation, creating an environment where learners are driven to engage with the material and more adept at transferring that knowledge into real-world applications.

### 2 LITERATURE REVIEW

Implementing a sustainable environment during training sessions is highly beneficial in facilitating knowledge transfer. Celestine and Perryer (2016) have posited that the impact of national cultural values and intrinsic desire to transfer tacit knowledge is contingent upon cultural contexts. In their study, Llopis and Foss (2016) researched the connection between organizational climate, knowledge sharing, and the potential moderating influences of intrinsic motivation and work autonomy. The outcomes of their study revealed that the influence of climate on information sharing is moderated by intrinsic motivation and work autonomy. Including training elements focused on sustainable environmental practices, including intrinsic and extrinsic incentives, is crucial for facilitating the dissemination of knowledge across various organizational and cultural contexts. The present empirical study aims to examine the many roles that supervisors play in shaping the culture of training programmes and their impact on fostering intrinsic motivation for knowledge transmission. The analysis conducted by Mohamad and Abd Rahman (2023) suggests that supervisor support has a significant role in promoting
intrinsic motivation and enabling knowledge transfer. The study by Martín Cruz et al. (2009) provides empirical evidence supporting the considerable impact of employee motivation on knowledge transfer. This study also impacts employees' propensity to engage in knowledge-sharing activities inside the organizational context. The centrality and performance of individuals in multinational organizations are influenced by motives and knowledge sourcing (Teigland and Wasko, 2009). Yan and Davison (2013) state that intrinsic motivation mediates behaviour transfer. This suggests that persons with greater levels of intrinsic motivation are more inclined to transition from being searchers of knowledge to being contributors. The study conducted by Minbaeva (2008) provides evidence of the impact of HRM practices on the extrinsic and intrinsic motivation of knowledge receivers. The analysis posits that implementing effective human resource management practices positively impacts individuals' motivation to engage in knowledge transfer inside multinational corporations. In particular, the role of innate motivation is found to be significant in this process. Based on Lin's (2007) research findings, it can be inferred that individuals who possess a greater level of intrinsic drive are more likely to demonstrate a voluntary inclination towards information sharing. According to Olatokun and Nwafor (2012), the study examines the influence of extrinsic and intrinsic incentives on civil officials' intentions to share knowledge. This statement underscores the significance of intrinsic motivation in influencing the knowledge-sharing behaviours of civil servants. Another area of research examines the connection between HRM practices and the transmission of knowledge at the individual level. The present study elucidates HRM practices impact knowledge transfer, with a particular emphasis on the substantial role intrinsic motivation plays (Minbaeva et al., 2012).

The positive and statistically significant impact of intrinsic motivation on knowledge transfer and management has been confirmed by scholars such as Yan and Davison (2013) and Law et al. (2017). The perspective put forth by Lam and Lambermont-Ford (2010) is that this notion, emphasizes the interconnected nature of motivation and information sharing. The study by Nguyen (2020) introduces the concept of additive effects, highlighting the reinforcement of intrinsic drive in online knowledge-sharing situations through the combination of extrinsic motivation and organizational culture. This implies that the presence of extrinsic drive has a role in bolstering intrinsic motivation in some online contexts. The predictive influence of extrinsic motivational factors on the formation and progress of knowledge-sharing and transfer initiatives has
been underscored in recent research conducted by Mohamad et al. (2023), Steen et al. (2023), and Thomas and Gupta (2022). Zafar et al. (2014) conducted an in-depth analysis of the elements that drive employee motivation and their subsequent impact on knowledge transfer. The authors highlight the need to critically evaluate how extrinsic motivation factors change knowledge transfer results and influence job satisfaction. Minbaeva et al. (2012) thoroughly investigate individual-level mechanisms, analyzing both extrinsic and intrinsic motivation components and their relative impacts on knowledge transmission. The assessment conducted by Lin in 2007 provides more support for the influence of extrinsic motivators on the inclination of employees to engage in knowledge sharing. In the health sector, factors such as training design and training characteristics positively predict employees’ performance (Bhatti et al., 2022; Bhatti et al., 2023).

The significance of motivation in knowledge transfer has been highlighted by research conducted in several fields. Zafar et al. (2014) provide empirical evidence supporting employee motivation's significance in knowledge transfer, confirming its positive impact. Within the academic domain, Sharif et al. (2023) have provided insights into the noteworthy influence exerted by academic support, motivation to learn, and motivation to transfer on the training transfer process. These findings hold consequences for institutions of higher education, encompassing both public and private colleges. Researchers such as Easterby-Smith et al. (2008) and Gegenfurtner and Vauras (2012) also recognize the influential impact of learning motivation on information transmission. Mohamad and Abd Rahman (2023) underscore the significant significance that information transmission plays in facilitating intellectual exchange. The research conducted by Kalling (2003) supports the concept of internal knowledge transmission inside organizations, emphasizing the significant impact of motivation. According to the analysis conducted by Martín Cruz et al. (2009), there is a suggestion that employee motivation has a beneficial influence on the transfer of information. The study focuses on examining the particular motivational elements that either enable or hinder the sharing of knowledge within organizational contexts. In his study conducted by Tho (2017) and expands upon this viewpoint by asserting the existence of a significant connection between the motivation to learn and the transfer of knowledge from educational institutions to corporate entities. Gutić Martinčić (2020) emphasizes the substantial effect of motivation on the transmission of information among employees in organizational
contexts, thus reinforcing the connection between motivation and knowledge transfer.

The existing literature consistently highlights the favourable associations between intrinsic motivation, extrinsic motivation, and knowledge transfer across various settings. Besides, substantial evidence supports the significant impact of motivation to learn on knowledge transfer. However, it is imperative to note that the specific dynamics of these relationships, particularly the mediating contribution of motivation to learn, warrant empirical validation within the unique context of Saudi Arabian employees. Drawing upon the identified gaps in current research and building on the insights from the literature, the researcher propose Figure 1 as a conceptual framework. The purpose of this framework is to function as a tool for empirically validating the connections among intrinsic motivation, extrinsic motivation, motivation to learn, and knowledge transfer within the context of employees in Saudi Arabia. By doing so, the researcher aims to contribute valuable insights to understanding motivational factors influencing knowledge transfer within this distinct cultural and organizational context. Through empirical confirmation, this conceptual framework will enhance our theoretical understanding and provide practical implications for optimizing knowledge transfer strategies within the Saudi workforce.

Figure 1. Conceptual model of the study

Source: Developed by the researcher
3 HYPOTHESES DEVELOPMENT

3.1 SUSTAINABLE ENVIRONMENT TRAINING AND KNOWLEDGE TRANSFER

The training components related to sustainable environment, including intrinsic and extrinsic motivation, play a vital role in promoting knowledge transfer across different organizational and cultural settings. The investigation of Martín Cruz et al. (2009) provides empirical evidence supporting employee motivation's impact on the knowledge transfer process. This study also impacts employees' propensity to engage in knowledge-sharing activities inside the organizational context. Motives and knowledge sourcing influence the centrality and performance of individuals in multinational businesses (Teigland and Wasko, 2009). In the same direction, Yan and Davison (2013) claim that intrinsic motivation is a mediator in this behavioural transfer, indicating that individuals with higher intrinsic motivation are more likely to shift from knowledge seekers to contributors. Minbaeva's (2008) study demonstrates HRM practices affecting knowledge receivers' extrinsic and intrinsic motivation. The study suggests that effective HRM practices motivate individuals for intra-MNC knowledge transfer, with inherent motivation playing a crucial role. According to Lin's (2007) study, employees with higher intrinsic motivation are more inclined to share knowledge willingly. The empirical study investigates the roles of supervisors in training program culture and the training of intrinsic motivation for knowledge transfer. It is likely to highlight the influence of supervisor support in fostering intrinsic motivation and facilitating knowledge transfer (Mohamad and Abd Rahman, 2023). Another research focuses on linking HRM practices to knowledge transfer at the individual level. This study uncovers mechanisms through which HRM practices influence knowledge transfer, with intrinsic motivation playing a significant role (Minbaeva et al., 2012).

The literature consistently underscores the positive correlation between extrinsic motivation and knowledge transfer. Minbaeva (2008) contends that HRM practices are pivotal in influencing extrinsic and intrinsic motivation, specifically within intra-MNC knowledge transfer. Organizational strategies, including implementing extrinsic motivators, exert a tangible impact on the willingness of knowledge receivers to actively participate in knowledge transfer initiatives, as highlighted by Martín Cruz et al. (2009). Their work suggests a predictive relationship between employee motivation and successful knowledge transfer processes, particularly the extrinsic dimension. Zafar et al. (2014) delve into the determinants of employee motivation and their consequential effects.
on knowledge transfer, emphasizing the critical assessment of how extrinsic motivation factors distinctly shape knowledge transfer outcomes and influence job satisfaction. Arzenšek et al. (2014) shed light on the significant role of extrinsic motivators in the knowledge transfer activities of young researchers, acknowledging their dual capacity to facilitate or impede knowledge sharing. Considering individual-level mechanisms, Minbaeva et al. (2012) demonstrate a comprehensive approach by examining both extrinsic and intrinsic motivation factors at the individual level and their respective contributions to knowledge transfer. Lin's assessment in 2007 reinforces the impact of extrinsic motivators on employees' willingness to share knowledge. Scholars such as Yan and Davison (2013) and Law et al. (2017) affirm intrinsic motivation's positive and statistically significant effect on knowledge transfer and management. Lam and Lambermont-Ford's (2010) motivation-based perspective aligns with this, highlighting the mutually reinforcing relationship between motivation and knowledge sharing. Nguyen's (2020) study introduces the concept of additive effects, emphasizing how extrinsic motivation, when combined with organizational culture, strengthens intrinsic motivation in online knowledge-sharing contexts. This suggests that extrinsic motivation acts as a contributing factor in enhancing intrinsic motivation within specific online environments. Recent studies by Mohamad et al. (2023), Steen et al. (2023), and Thomas and Gupta (2022) collectively emphasize the predictive power of extrinsic motivation factors in shaping the development of knowledge-sharing and transfer initiatives. In summary, the literature consistently points to the constructive role of extrinsic motivation in fostering effective knowledge transfer processes across diverse organizational contexts.

Consequently, the existing literature consistently underscores the positive influence of intrinsic and extrinsic motivation on knowledge transfer in various organizational contexts. Intrinsic motivation, driven by personal satisfaction and a sense of purpose, encourages individuals to share their knowledge willingly. In contrast, extrinsic motivation, fueled by external rewards and recognition, effectively incentivizes knowledge-sharing behaviours. However, there is still scope for enhancing the understanding of how these motivational factors impact knowledge transfer among employees in several areas in Saudi Arabia, including management services, human resources, finance, policy, service, and information technology. Therefore, there is a recognized need for further investigation in this specific context, indicating a gap in the
literature and an opportunity to explore how intrinsic and extrinsic motivation uniquely shape knowledge transfer dynamics within these sectors in Saudi Arabia. Hence:

**H1. Intrinsic motivation significantly predicts knowledge transfer.**

**H2. Extrinsic motivation significantly predicts knowledge transfer.**

### 3.2 MOTIVATION TO LEARN AND KNOWLEDGE TRANSFER

Motivation to learn emerges as a pivotal factor in shaping the landscape of knowledge transfer, as underscored by studies in various domains. Mohamad and Abd Rahman (2023) emphasize its substantial role in fostering knowledge transfer. Kalling's (2003) exploration of internal knowledge transfer within organizations corroborates this, highlighting the influential role of motivation. Martín Cruz et al. (2009) posit a positive impact of employee motivation on knowledge transfer, delving into the specific motivational factors that facilitate or impede knowledge exchange within organizational frameworks. Tho (2017) extends this perspective by affirming the positive correlation between learning motivation and knowledge transfer from academic institutions to business organizations. Further supporting the nexus between motivation and knowledge transfer, Wen and Lin (2014) reveal the significant relationship between trainees' characteristics, particularly motivation to learn, and the successful transfer of training. Kang and Kim's (2017) social network approach adds depth to this understanding, emphasizing how motivation, coupled with opportunity and ability, intricately contributes to knowledge transfer dynamics. Zafar et al. (2014) substantiate the predictive relevance of employee motivation in knowledge transfer, affirming its positive contribution. In the realm of academia, Sharif et al. (2023) shed light on the significant role played by academic support, motivation to learn, and motivation to transfer in the transfer of training, with implications for both public and private universities.

Gutić Martinčić (2020) underscores the noteworthy role of motivation in employee knowledge transfer within organizational settings. Pérez-Nordtvedt et al. (2008) contribute insights into the practical aspects of cross-border knowledge transfer, with motivation emerging as a critical driver of effectiveness and efficiency. Noteworthy scholars such as Arzenšek et al. (2014), Simonin (2004), and Darr and Kurtzberg (2000) collectively emphasize the robust and constructive contribution of motivation to learn in shaping knowledge transfer across global business collaborations. These findings illuminate the pervasive and influential role of motivation to learn in the intricate
dynamics of knowledge transfer across diverse contexts.

Consequently, due to its multifaceted impact, confirmation of the relationships between motivation to learn and knowledge transfer is pivotal for Saudi management and professionals. Understanding this link is crucial for optimizing training programs, tailoring learning initiatives to align with cultural values, and fostering a continuous learning culture. In the unique context of Saudi Arabia, this confirmation offers insights into strategic decision-making, talent development, and employee engagement. It contributes to workplace productivity and enhances organizational adaptability in the dynamic regional business landscape. Moreover, recognizing the positive influence of motivation on knowledge transfer provides a foundation for creating a supportive work environment, fostering employee satisfaction, and positioning organizations for a competitive advantage. Ultimately, in pursuing a knowledge-driven economy, confirming these relationships becomes integral to shaping a workforce that is skilled and motivated to drive innovation and contribute to the sustainable growth of Saudi organizations. Hence, the researcher proposed:

\[ H3. \text{Motivation to learn significantly predicts knowledge transfer.} \]

3.3 MOTIVATION TO LEARN AS A MEDIATOR

The literature in various domains consistently supports the notion that motivation to learn has a mediation function in influencing the link between motivation and knowledge transfer. For instance, Mohamad et al. (2020, 2021) investigated the interplay between management support, task performance motivation, and motivation to learn, highlighting the latter as a crucial mediator. The research conducted by Magen-Nagar and Cohen (2017) presents an empirical investigation that explores the mediating function of online learning strategies in the relationship between motivation and the perception of achievement in digital learning. According to Lauzier and Mercier (2018), orientation, learning motivation, and social support propose a moderated mediation model for training transfer intentions. Among secondary school students, motivation to learn science mediates attitudes and career aspirations (Razali et al., 2020). Pan and Shao (2020) investigate teachers' online feedback and learning motivation, identifying learning engagement as a mediator. In a similar vein, Klein et al. (2006) argue that how instruction is delivered, the orientation towards learning goals, and the perceived obstacles all impact both the motivation to learn and the outcomes of a course. According to Pratama and
Pinayani (2019), a mediating relationship exists between learning motivation, learning style, and performance. Tsai and Tai (2003) conducted a study that posits perceived importance as a mediating factor in the connection between training assignments and motivation. According to a study conducted by Hutasuhut and Wirawan (2019), empirical evidence indicates that socio-economic circumstances and parental attention play a significant role in influencing learning accomplishment. Moreover, the study identifies motivation to learn as a mediating component in this relationship.

The existing literature consistently emphasizes the pivotal mediating role of motivation to learn in the relationships involving intrinsic and extrinsic motivation and their impact on knowledge transfer across diverse contexts. However, it's noteworthy that there needs to be more empirical investigations within the specific context of employees in Saudi Arabia. Therefore, further research and empirical confirmation are imperative to enhance our understanding of how motivation to learn mediates intrinsic and extrinsic motivation influencing knowledge transfer within the Saudi Arabian workforce.

**H4. Motivation to learn positively mediates the connection between intrinsic motivation and knowledge transfer.**

**H5. Motivation to learn positively mediates the connection between extrinsic motivation and knowledge transfer.**

**4 METHODS**

**4.1 SURVEY MODES AND RESPONDENTS**

The researcher strategically employed quantitative methods to delve into the intricacies of the issue methodically. This chosen approach holds profound significance due to its inherent robustness in uncovering and analyzing the relevant facts and providing a structured and reliable framework for drawing meaningful conclusions (Lewin, 2005). The systematic nature of quantitative methods allows for a comprehensive examination, facilitating a more nuanced understanding of the problem (Savela, 2018). This methodological choice is further justified by its capacity to generate statistically sound and replicable results, enhancing the overall credibility of our findings.

The researcher employed convenience sampling techniques in collecting online responses, deeming it the most justifiable approach for our study. Convenience sampling, while limited, was considered appropriate due to its practicality and efficiency in reaching our target audience within the constraints of time and resources. The decision to utilize
online platforms for data collection aligns with contemporary trends and facilitates widespread accessibility for respondents from diverse professional backgrounds. This approach facilitated rapid and efficient data collection at a reasonable cost. This initiative aimed to enhance the inclusivity of many professional domains within Saudi Arabia, such as the organizational units encompassed within the institution include managerial services, human resources, finance, policy, service, and information technology departments. Acknowledging the inherent constraints associated with convenience sampling, our chosen methodology was deemed appropriate due to the necessity for a practical and viable technique to gather valuable insights from our particular target demographic in a prompt and resource-effective manner.

The intended respondents of the study comprises individuals employed in various departments, namely management services, human resources, finance, policy, service, and information technology. These departments collectively represent the upper echelon of management service groups in Saudi Arabia, encompassing both managerial and professional roles. The careful and deliberate selection of respondents from various departments such as the organizational units encompassed within the institution include managerial services, human resources, finance, policy, service, and information technology departments. The study incorporates a diverse range of specialists from several sectors, including decision-makers and implementers who collectively represent the region's top echelons of management service organizations, management, and professionals. The intentional concentration enables us to acquire a comprehensive viewpoint on the subject, considering the interdependence of organizational activities. Furthermore, our study endeavours to incorporate the knowledge and experience of critical persons who significantly impact strategic decision-making processes. This approach allows us to comprehensively understand the subject matter, encompassing several functional areas while also considering the unique cultural, economic, and legal aspects peculiar to Saudi Arabia. This methodology guarantees our findings' robustness and high applicability to the ever-changing landscape of management services in the region. Ultimately, 288 viable samples were gathered and subsequently subjected to inference for subsequent analysis.
4.2 QUESTIONNAIRE’S RELIABILITY AND VALIDITY

The survey questionnaire was employed as the principal instrument for gathering data from the participants in our study. To determine the reliability and validity of our tool, careful pilot research was done (In, 2017). The assessment of reliability, as quantified by Cronbach's alpha, revealed a significant degree of internal consistency for the measurement instrument, exceeding 0.786 (Hair et al., 2020). Furthermore, the researcher validated the instrument by seeking feedback from both respondents and field experts (Friede and Kieser, 2006). This comprehensive validation process ensured that the survey was reliable and aligned with the perspectives of those intimately familiar with the field. With minor adjustments based on the insights garnered from the pilot study, the researcher confidently launched a validated survey for large-scale data collection, ensuring the robustness and credibility of our dataset.

4.3 MEASURES

The researcher measured sustainable environment training on two sub-factors: intrinsic motivation and extrinsic motivation. The researcher measured intrinsic motivation on six items and extrinsic motivation on six items. These items are adopted from the studies of Burke and Baldwin (1999) and Tharenou (2001). Likewise, the researcher measured motivation to learn on eight items adopted by Burke and Baldwin (1999) and Tharenou (2001) as measured by Mohamad et al. (2023). Finally, the researcher applied six items to gauge transfer training. The researcher adopted these items from Wallace et al. (2011) and Podsakoff et al. (1997). All the items ranged on a five-point Likert scale with strongly agree to strongly disagree options.

5 RESULTS

5.1 MEASUREMENT MODEL

The evaluation of the measurement model is undertaken using composite reliability (CR), Cronbach's alpha (α), and the average variance extracted (AVE), as proposed by Hair et al. (2020). The composite dependability (CR) values were more significant than 0.70 for the other structures, accompanied by factor loadings that were also greater than 0.70 (Hair et al., 2019). Furthermore, all the constructs in the model revealed values of AVE greater than 0.50, indicating a reasonable level of average variance extracted (AVE) (Hair et al., 2019). As a result, the researcher established
convergent validity across all the constructs tested in the study, as seen in Table 1.

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</table>

Source: Estimated by the scholars

Note(s): IM= Intrinsic motivation; EM= Extrinsic motivation; MTL= Motivation to learn; KT= Knowledge transfer

Besides, the researcher performed a comparative analysis between discriminant validity (DV) and the square root of the average variance extracted (AVE) about the inter-correlations among the components, as described by Chin (2010). Hair et al. (2020) conducted a study in which they assessed the average variance extracted (AVE) values and their relationship with the squared correlation across constructs, as proposed by Fornell and Larcker (1981). The outcomes shown that all AVE scores demonstrated higher values. As a result, the researcher have successfully shown the achievement of a noteworthy dependent variable (Table 2).
Table 2. Discriminant validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>IM</th>
<th>EM</th>
<th>MTL</th>
<th>KT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM</td>
<td>---</td>
<td>0.828</td>
<td>---</td>
<td>0.159</td>
</tr>
<tr>
<td>EM</td>
<td>0.828</td>
<td>---</td>
<td>0.821</td>
<td>0.059</td>
</tr>
<tr>
<td>MTL</td>
<td>0.8</td>
<td>0.821</td>
<td>---</td>
<td>0.036</td>
</tr>
<tr>
<td>KT</td>
<td>0.159</td>
<td>0.059</td>
<td>0.036</td>
<td>---</td>
</tr>
</tbody>
</table>

Source: Estimated by the scholar

Note(s): IM= Intrinsic motivation; EM= Extrinsic motivation; MTL= Motivation to learn; KT= Knowledge transfer

5.2 STRUCTURAL MODEL

In the study done by Sarstedt et al. (2016), the researcher employed IBM version 26.0 of Analysis of Moment Structures (AMOS) to analyses and interpret the results obtained. Furthermore, using AMOS enables the creation of innovative insights by examining hypotheses about complex interactions among variables (Afthanorhan, 2013).

With regard to the assessment of direct hypotheses, the path coefficient suggests a positive significant impact of intrinsic motivation on knowledge transfer (H1= β= 0.692; CR=7.088***; p<0.01). Consequently, H1 is supported. Moreover, the effect of extrinsic motivation on knowledge transfer is positive and significant (H2= β= 0.663; CR =8.314***; p<0.01), which also supported the H2. Finally, the researcher confirmed the significant impact of motivation to learn on knowledge transfer (H3= β= 0.489; CR =6.189***; p<0.01). Consequently, H3 is also supported (Table 3 and Figure 2).

Table 3. Path co-efficient [direct]

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Paths</th>
<th>B</th>
<th>SE</th>
<th>CR</th>
<th>P-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>IM → KT</td>
<td>0.692</td>
<td>0.098</td>
<td>7.088***</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>EM → KT</td>
<td>0.663</td>
<td>0.080</td>
<td>8.314***</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>MTL → KT</td>
<td>0.489</td>
<td>0.079</td>
<td>6.189***</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: Estimated by the scholar

Note: SE=standard error; CR=critical ratio; ***p=significance level at <0.01.

IM= Intrinsic motivation; EM= Extrinsic motivation; MTL= Motivation to learn; KT= Knowledge transfer

With regard to indirect paths, the study confirmed a mediating effect of motivation to learn in developing a connection between intrinsic motivation and knowledge transfer (H4= β= 0.692; CR =7.088***; p<0.01), which accepted the H4. On the other hand, the analysis did not confirm a positive mediating effect of motivation to learn in reinforcing the connection between extrinsic motivation and knowledge transfer (H5= β= -0.023; CR =0.701***; p>0.01). As a result, H5 is rejected (Table 4 and Figure 2).
Table 4. Path coefficient [Indirect]

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Paths</th>
<th>β</th>
<th>SE</th>
<th>CR</th>
<th>P-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4</td>
<td>IM → MTL → KT</td>
<td>0.692</td>
<td>0.098</td>
<td>7.088***</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>EM → MTL → KT</td>
<td>0.023</td>
<td>0.032</td>
<td>0.701</td>
<td>0.484</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

Source: Estimated by the scholars
Note: SE=standard error; CR=critical ratio; ***p=significance level at <0.01.
IM= Intrinsic motivation; EM= Extrinsic motivation; MTL= Motivation to learn; KT= Knowledge transfer

6 DISCUSSION AND CONCLUSION

The study proposed to predict sustainable environment training towards knowledge transfer through motivation to learn among employees of Saudi Arabia. About the assessment of the hypotheses, the results found a significant positive effect of intrinsic motivation and extrinsic motivation on knowledge transfer among employees of Saudi Arabia. These results are accorded with several findings like Lin's (2007), Minbaeva (2008), Martín Cruz et al. (2009), Lam and Lambermont-Ford (2010), Olatokun and Nwafor (2012), Arzenšek et al. (2014), Celestine and Perryer (2016), Minbaeva et al. (2012), Nguyen (2020) Thomas and Gupta (2022), Mohamad and Abd Rahman (2023), Mohamad et al. (2023) and Steen et al. (2023), who confirmed the same outcomes earlier.
The results show that intrinsic motivation, driven by an individual's internal satisfaction and genuine interest in knowledge sharing, fosters heightened employee engagement and initiative. Concurrently, extrinsic motivation, manifested through external rewards and recognition, provides an additional incentive for proactive knowledge transfer behaviours. The alignment of these motivations with individual and organizational goals and a positive organizational culture that values learning contribute to a fertile ground for knowledge-sharing activities. The cultural context in Saudi Arabia, emphasizing collaboration and collective efforts, further reinforces the observed positive effects. Additionally, the role of recognition as an extrinsic motivator cannot be understated, as employees who receive acknowledgement for their contributions are more likely to be motivated to continue actively participating in knowledge transfer initiatives. This confluence of intrinsic and extrinsic motivational factors and cultural considerations underscores the multifaceted nature of the observed positive effects on knowledge transfer in the Saudi Arabian context.

Furthermore, the study confirmed a positive effect of motivation to learn on knowledge transfer. These results are in line with previous literature (Easterby-Smith et al., 2008; Martín Cruz et al., 2009; Gegenfurtner and Vauras, 2012; Zafar et al., 2014; Tho, 2017; Kang and Kim, 2017; Mohamad and Abd Rahman, 2023; Sharif et al., 2023). These results demonstrate that the positive impact of motivation to learn on knowledge transfer among employees in Saudi Arabia is grounded in a confluence of pivotal factors. A key driver is the proactive learning orientation inherent in individuals with a strong motivation to learn, fostering an eagerness to seek and disseminate knowledge actively. The intrinsic interest in learning is particularly noteworthy, as employees who are genuinely curious and invested in expanding their knowledge base are more likely to contribute to the knowledge transfer process. This motivation aligns with organizational goals, creating a symbiotic relationship where individual learning endeavours synergistically support broader objectives. The positive influence extends to heightened employee engagement, a crucial element in fostering a collaborative work environment conducive to effective knowledge-sharing practices. Moreover, the cultural emphasis on education and development in Saudi Arabia aligns with employees' motivation to learn, reinforcing a commitment to continuous improvement and skill enhancement. The observed positive effect underscores the intertwined dynamics of intrinsic motivations, organizational alignment, cultural values, and their collective
impact on fostering a learning and knowledge transfer culture in the Saudi Arabian workplace.

The results suggest that the indirect pathways play a role in facilitating the drive to learn by establishing a connection between intrinsic motivation and the transfer of knowledge. Nevertheless, it should be noted that these pathways do not serve as moderators in the relationship between extrinsic motivation and knowledge transmission. These outcomes are also in line with several scholars who offered the consistent and inconsistent mediating effects of motivation to learn between intrinsic motivation, extrinsic motivation and knowledge transfer (Tsai and Tai, 2003; Klein et al., 2006; Mohamad et al., 2020, 2021; Magen-Nagar and Cohen, 2017; Lauzier and Mercier, 2018; Razali et al., 2020; Pan and Shao, 2020; Pratama and Pinayani, 2019; Hutasuhut and Wirawan, 2019). The nuanced findings revealing motivation to learn as a mediator in the relationship between intrinsic motivation and knowledge transfer, while not serving a similar mediating role in the connection between extrinsic motivation and knowledge transfer, can be explained through various interconnected factors. Intrinsic motivation, stemming from internal factors like personal interest and satisfaction, seamlessly aligns with a robust learning orientation, fostering a natural mediation through motivation to learn. Individuals who are intrinsically motivated are likely to possess an inherent drive for continuous learning, translating into an active engagement in knowledge-sharing endeavours. On the other hand, extrinsic motivation, rooted in external rewards or recognition, may not inherently stimulate a solid motivation to learn. The differentiated impact on knowledge transfer processes suggests that while intrinsic motivation influences a cognitive and emotionally driven sharing culture, extrinsic motivation may not be as directly associated with the intrinsic curiosity and passion that drive proactive knowledge transfer behaviours. This variation in the mediating effects underscores the individual and contextual intricacies shaping the dynamics between different motivational factors and knowledge transfer processes within organizational contexts.

In summary, this study's extensive results support a notable beneficial influence of intrinsic motivation, extrinsic motivation, and motivation to learn on the transfer of information among employees. The observed results indicate that employees driven by intrinsic and extrinsic motivation and those motivated to learn are more likely to engage in effective knowledge-sharing behaviours. Significantly, the identified mediating effect of motivation to learn in the relationship between intrinsic motivation and knowledge
transfer adds depth to researcher understanding of these dynamics. This nuanced mediation suggests that the internal drive and satisfaction associated with intrinsic motivation are channelled through a motivation to learn, influencing active participation in knowledge transfer processes. However, it is noteworthy that this mediating role is not observed in the association between extrinsic motivation and knowledge transfer. This differentiation in mediating effects provides valuable insights into the distinct pathways through which different motivational factors contribute to the intricate knowledge transfer processes within the organizational contexts of Saudi Arabia.

7 LIMITATIONS, IMPLICATIONS AND FUTURE RESEARCH

While providing valuable insights, this study has certain limitations that warrant consideration. Firstly, the research scope is confined to employees within diverse organizations in Saudi Arabia, limiting the generalizability of findings to broader international contexts. Additionally, the conceptual framework must have an explicit grounding in established theories, potentially limiting the depth of theoretical underpinning. Although offering statistical robustness, the exclusive use of quantitative methods may not capture the richness of qualitative nuances that could enhance the overall understanding of motivational dynamics and knowledge transfer. Furthermore, while substantial, the study's reliance on a sample of 288 participants may need to be revised to represent the diverse perspectives within the target population fully. These limitations underscore the need for caution in extrapolating the findings beyond the specified context and emphasize opportunities for future research to integrate theoretical frameworks and incorporate a more diverse array of methodological approaches for a comprehensive understanding of the complexities involved.

The study's findings hold significant practical implications for organizations in Saudi Arabia, suggesting avenues for enhancing employee knowledge transfer. By recognizing and leveraging intrinsic and extrinsic motivation, organizations can tailor training programs, implement effective recognition and rewards systems, and promote a culture that values continuous learning. The identified mediation role of motivation to learn in the association between intrinsic motivation and knowledge transfer underscores the importance of fostering a learning-oriented environment. Practical applications extend to leadership strategies that integrate motivational elements. The theoretical implications contribute to the ongoing development of motivational theories, offering insights into
cross-cultural considerations and highlighting the need for closer integration between motivational theories and knowledge transfer models. This study is a foundation for organizational practices that align with motivational drivers and offers theoretical advancements in understanding the intricate dynamics influencing knowledge transfer in organizational contexts.

Building upon the identified limitations, future research endeavours can explore several avenues to enhance the depth and breadth of researcher understanding in the field: Investigating the dynamics of intrinsic and extrinsic motivation on knowledge transfer in different cultural contexts beyond Saudi Arabia would contribute to a more comprehensive understanding of these relationships' universality or context-specific nature. Future studies could benefit from a more robust theoretical underpinning, integrating established motivational theories to provide a solid foundation for conceptual frameworks. This approach could deepen insights into the underlying mechanisms and factors influencing the relationships observed. Incorporating mixed-methods research designs that blend quantitative and qualitative approaches would provide a more holistic understanding of the intricacies involved in motivational dynamics and knowledge transfer. Expanding the sample size and diversity of participants can ensure a more representative and nuanced exploration of these relationships, allowing for subgroup analyses and comparisons that account for a broader range of organizational and demographic factors. By addressing these avenues, future research can contribute to a more nuanced, contextually grounded, and theoretically informed understanding of the intricate interplay between motivation and knowledge transfer in organizational settings.

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